Golden Spike National Historical Site

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## Golden Spike National Historical Site Fire Management



## **Research Burns Attempt To Restore Native Grasslands**

Golden Spike National Historic Site (NHS) recently completed several, small prescribed fires as part of a joint research project being carried out between the National Park Service (NPS) and Utah State University. The goals of these burns are to determine the best method of restoring historic vegetation patterns and in the process, to reduce the amount of non-native, invasive grasses. The fires will also help to reduce the threat of wildland fire to existing NPS infrastructures and the visiting public.

This small series of prescribed fires were ignited in four 17 x 5 meter plots, located in four different areas of the historical site for a total of 16 plots. Other plots in the same study areas will then be treated by other methods of vegetation reduction such as mechanical and chemical treatments to determine which method or combination of methods is most effective in restoring native vegetation and also to reduce non-native grasses.

Previous attempts at using prescribed fire on the historical site have had some negative impacts by allowing increased colonization of non-native invasive grasses, especially cheatgrass. Currently, these grasses are reduced by annual mowing around infrastructure at the site which reduces the threats due to wildland fire but does nothing to restore the health of the ecosystem. This series of prescribed fires is being conducted in order to determine the best approach to the reestablishment of native and historic plant communities, specifically Great Basin Sagebrush and native grasses. Fire is one aspect of this research and will be utilized on a small scale to compare the effectiveness in relation to mechanical and chemical treatments. If the results of the research burns are successful, the program may eventually encompass additional areas of the historical site.

The fire is being conducted under the guidance of the park's fire management plan and is one of several prescribed fires that may be conducted over the next few years. The goal is to reduce the vegetation to more manageable and historic types and levels. The current, excessive and volatile vegetation patterns on the site create a hazard to firefighters and the public by increasing the frequency and intensity of unplanned wildfires. Another benefit of the prescribed fires will be to increase the diversity of plants in the area which will in turn create more diverse wildlife habitats.